

## EAST SEARCH

5/31/05

| L#  | Hits  | Search String   | Databases                                   |
|-----|-------|---|---|
| S1  | 6     | 6,240,399.pn. or "6,236,894".pn. or "6,128,607".pn.   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S2  | 21193 | pharmacodynamic or pharmacokinetic  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S3  | 619   | (pharmacodynamic or pharmacokinetic) near2 model\$1   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S4  | 1248  | (optimal or "near optimal") near2 model\$1  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S5  | 1863  | S1 or S3 or S4  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S6  | 233   | S5 and (mathematical near2 model\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S7  | 1863  | S5 or S6  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S8  | 2     | S7 and ("search space" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S9  | 2     | S7 and ("mutually exclusive" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S10 | 49    | S7 and ("search space")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S11 | 150   | S7 and ("mutually exclusive")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S12 | 602   | S7 and (dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S13 | 656   | S8 or S9 or S10 or S11 or S12   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S14 | 1     | S13 and "full grid search"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S15 | 33    | S13 and "simulated annealing"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S16 | 18    | S13 and "integer programming"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S17 | 1     | S13 and "scatter search"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S18 | 1     | S13 and "path relinking"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S19 | 114   | S13 and (neural near2 network\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S20 | 2     | S13 and ("tabu search")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S21 | 52    | S13 and ("genetic algorithm")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S23 | 2     | S13 and (NONMEM or NMTRAN)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S24 | 6     | S13 and (control near2 file\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S26 | 1     | S13 and ((control near2 file\$1) with template\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S28 | 1     | S13 and ("log likelihood" with penalty)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S29 | 2     | S7 and ("log likelihood" with penalty)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S30 | 12    | ("log likelihood" with penalty)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S32 | 1     | S31 and (("variance matrix" or minimization or "standard errors" or "correlation matrix" or "nich     | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S34 | 19    | S21 and ("bit string" or fitness or (scal\$3 with fitness) or (select\$3 with (replacement or parents | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S35 | 19    | S21 and ((initial or random) with population)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S36 | 25    | S21 and ((individual with generation) or (goodness near2 fit) or (cost\$1 with attribute\$1) or pars  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S38 | 462   | S7 and ((pharmacokinetic with compartment\$1) or (non-linear with elimination) or (non-linear w       | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S41 | 1     | S7 and "full grid search"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S22 | 147   | S14 or S15 or S16 or S17 or S18 or S19 or S20 or S21  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S25 | 7     | S23 or S24  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S27 | 2     | S7 and ((control near2 file\$1) with template\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |

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|-----|------|--|---|
| S31 | 12   | S28 or S29 or S30  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S33 | 5    | S31 and ("variance matrix" or minimization or "standard errors" or "correlation matrix" or "niche    | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S43 | 21   | log likelihood same ("variance matrix" or minimization or "standard errors" or "correlation matrix   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S37 | 29   | S34 or S35 or S36  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S39 | 130  | S38 and S13  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S40 | 24   | S15 and ((initial with temperature) or tolerance or minimization or (initial with energy) or (higher | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S44 | 30   | S15 and ((initial with temperature) or tolerance or minimization or (initial with energy) or (higher | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S45 | 2352 | simulated annealing  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S46 | 86   | S45 and ("initial temperature")  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S47 | 24   | S46 and ((higher or model) with energy)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S48 | 24   | S47 and (Boltzman\$1 or probability)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S49 | 6    | 6,240,399.pn. or "6,236,894".pn. or "6,128,607".pn.  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S50 | 619  | (pharmacodynamic or pharmacokinetic) near2 model\$1  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S51 | 1248 | (optimal or "near optimal") near2 model\$1   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S52 | 1863 | S49 or S50 or S51  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S53 | 233  | S52 and (mathematical near2 model\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S54 | 1863 | S52 or S53   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S55 | 2    | S54 and ("search space" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S56 | 2    | S54 and ("mutually exclusive" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S57 | 49   | S54 and ("search space")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S58 | 150  | S54 and ("mutually exclusive")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S59 | 602  | S54 and (dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S60 | 656  | S55 or S56 or S57 or S58 or S59  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S61 | 1    | S60 and "scatter search"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S62 | 12   | ("log likelihood" with penalty)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S63 | 10   | S54 and (NONMEM or NMTRAN)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S64 | 6    | 6,240,399.pn. or "6,236,894".pn. or "6,128,607".pn.  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S65 | 619  | (pharmacodynamic or pharmacokinetic) near2 model\$1  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S66 | 1249 | (optimal or "near optimal") near2 model\$1   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S67 | 1864 | S64 or S65 or S66  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S68 | 233  | S67 and (mathematical near2 model\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S69 | 1864 | S67 or S68   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S70 | 2    | S69 and ("search space" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S71 | 2    | S69 and ("mutually exclusive" with dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S72 | 49   | S69 and ("search space")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S73 | 150  | S69 and ("mutually exclusive")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S74 | 603  | S69 and (dimensions)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S75 | 657  | S70 or S71 or S72 or S73 or S74  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S76 | 52   | S75 and ("genetic algorithm")  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S77 | 12   | S76 and ("upper limit" or "lower limit" or (scal\$3 with fitness))                                   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S78 | 1    | S76 and (scal\$3 with fitness)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S79 | 81   | genetic algorithm and (scal\$3 with fitness)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S80 | 36   | genetic algorithm and (scal\$3 near2 fitness)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |



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|------|-------|--|---|
| S125 | 93    | S124 and ("initial temperature")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S126 | 24    | S125 and ((higher or model) with energy)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S127 | 24    | S126 and (Boltzman\$1 or probability)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S128 | 7     | S96 and ("mutually exclusive" near2 set\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S129 | 2     | S96 and ("mutually exclusive" near2 feature\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S130 | 7     | S128 or S129   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S131 | 1     | S96 and ("mutually exclusive" near2 decision\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S132 | 1     | S96 and ("mutually exclusive" near2 option\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S133 | 2     | S96 and ("mutually exclusive" near2 parameter\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S134 | 3     | S96 and ("mutually exclusive" near2 alternative\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S135 | 6     | S131 or S132 or S134   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S136 | 14309 | (mathematical near2 model\$1)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S137 | 16105 | S92 or S93 or S136   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S138 | 61    | S137 and ("mutually exclusive" near2 (set\$1 or feature\$1 or decision\$1 or option\$1 or parame | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S139 | 702   | combinatorial near2 problem\$1   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S140 | 46    | S139 and "mutually exclusive"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S141 | 6     | 6,240,399.pn. or "6,236,894".pn. or "6,128,607".pn.  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S142 | 682   | (pharmacodynamic or pharmacokinetic) near2 model\$1  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S143 | 1384  | (optimal or "near optimal") near2 model\$1   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S144 | 2061  | S141 or S142 or S143   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S145 | 259   | S144 and (mathematical near2 model\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S146 | 2061  | S144 or S145   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S147 | 2     | S146 and ("search space" with dimensions)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S148 | 2     | S146 and ("mutually exclusive" with dimensions)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S149 | 55    | S146 and ("search space")  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S150 | 157   | S146 and ("mutually exclusive")  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S151 | 667   | S146 and (dimensions)  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S152 | 726   | S147 or S148 or S149 or S150 or S151   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S153 | 1     | S152 and "full grid search"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S154 | 38    | S152 and "simulated annealing"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S155 | 18    | S152 and "integer programming"   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S156 | 1     | S152 and "scatter search"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S157 | 1     | S152 and "path relinking"  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S158 | 126   | S152 and (neural near2 network\$1)   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S159 | 2     | S152 and ("tabu search")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S160 | 55    | S152 and ("genetic algorithm")   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S161 | 161   | S153 or S154 or S155 or S156 or S157 or S158 or S159 or S160                                     | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S162 | 2     |  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |

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Mark E. Sale

## EAST SEARCH

5/31/05

# **Results of search set S161:**

| Document Kind     | Codes Title   | Issue Date | Current OR | Abstract |
|-------------------|---|------------|------------|----------|
| US 20050111621 A1 | Planning system, method and apparatus for conformal radiation therapy                             | 20050526   | 378/65     |          |
| US 20050100209 A1 | Self-optimizing classifier  | 20050512   | 382/159    |          |
| US 20050096950 A1 | Method and apparatus for creating and evaluating strategies                                       | 20050505   | 705/7      |          |
| US 20050084907 A1 | Methods, systems, and software for identifying functional biomolecules                            | 20050421   | 435/7.1    |          |
| US 20050069162 A1 | Binaural adaptive hearing aid   | 20050331   | 381/312    |          |
| US 20050065421 A1 | System and method of measuring disease severity of a patient before, during and after treatment   | 20050324   | 600/407    |          |
| US 20050061967 A1 | Pattern recognition of whole cell mass spectra  | 20050324   | 250/288    |          |
| US 20050053999 A1 | Method for predicting G-protein coupled receptor-ligand interactions                              | 20050310   | 435/6      |          |
| US 20050043894 A1 | Integrated biosensor and simulation system for diagnosis and therapy                              | 20050224   | 702/19     |          |
| US 20040230105 A1 | Adaptive prediction of changes of physiological/pathological states using processing of biomed    | 20041118   | 600/301    |          |
| US 20040221163 A1 | Pervasive, user-centric network security enabled by dynamic datagram switch and an on-deme        | 20041104   | 713/182    |          |
| US 20040209237 A1 | Methods and apparatus for characterization of tissue samples                                      | 20041021   | 435/4      |          |
| US 20040208390 A1 | Methods and apparatus for processing image data for use in tissue characterization                | 20041021   | 382/260    |          |
| US 20040208385 A1 | Methods and apparatus for visually enhancing images   | 20041021   | 382/254    |          |
| US 20040207625 A1 | Methods and apparatus for displaying diagnostic data  | 20041021   | 345/440    |          |
| US 20040206914 A1 | Methods and apparatus for calibrating spectral data   | 20041021   | 250/458.1  |          |
| US 20040206913 A1 | Methods and apparatus for characterization of tissue samples                                      | 20041021   | 250/458.1  |          |
| US 20040206882 A1 | Methods and apparatus for evaluating image focus  | 20041021   | 250/201.2  |          |
| US 20040199481 A1 | Bayesian neural networks for optimization and control   | 20041007   | 706/21     |          |
| US 20040199334 A1 | Method for generating a quantitative structure property activity relationship                     | 20041007   | 702/27     |          |
| US 20040199307 A1 | Diagnostic system and method for enabling multistage decision optimization for aircraft preflight | 20041007   | 701/29     |          |
| US 20040193473 A1 | Effective security scheduler  | 20040930   | 705/9      |          |
| US 20040181498 A1 | Constrained system identification for incorporation of a priori knowledge                         | 20040916   | 706/45     |          |
| US 20040181441 A1 | Model-based and data-driven analytic support for strategy development                             | 20040916   | 705/7      |          |
| US 20040180322 A1 | Regional intestinal permeability model  | 20040916   | 435/4      |          |
| US 20040175039 A1 | Viewpoint-invariant image matching and generation of three-dimensional models from two-dim        | 20040909   | 382/181    |          |
| US 20040167721 A1 | Optimal fitting parameter determining method and device, and optimal fitting parameter determ     | 20040826   | 702/20     |          |
| US 20040165696 A1 | Systems and methods for global optimization of treatment planning for external beam radiation     | 20040826   | 378/65     |          |
| US 20040162638 A1 | System, method and apparatus for organizing groups of self-configurable mobile robotic agent      | 20040819   | 700/247    |          |
| US 20040161796 A1 | Methods, systems, and software for identifying functional biomolecules                            | 20040819   | 435/7.1    |          |
| US 20040153249 A1 | System, software and methods for biomarker identification   | 20040805   | 702/19     |          |
| US 20040137436 A1 | Method for measuring drug resistance  | 20040715   | 435/6      |          |
| US 20040111197 A1 | DIAGNOSTIC SYSTEM AND METHOD FOR ENABLING MULTISTAGE DECISION OPTIMIZ                             | 20040610   | 701/29     |          |
| US 20040110209 A1 | Method for predicting transcription levels  | 20040610   | 435/6      |          |
| US 20040107080 A1 | Method for modelling customised earpieces   | 20040603   | 703/6      |          |
| US 20040073319 A1 | Method for controlling and driving a technical process  | 20040415   | 700/14     |          |
| US 20040072245 A1 | Methods, systems, and software for identifying functional biomolecules                            | 20040415   | 435/7.1    |          |
| US 20040039530 A1 | Pharmacokinetic tool and method for predicting metabolism of a compound in a mammal               | 20040226   | 702/19     |          |
| US 20040032408 A1 | Recognition model generation and structured mesh generation system and method                     | 20040219   | 345/420    |          |
| US 20040030667 A1 | Automated systems and methods for generating statistical models                                   | 20040212   | 707/1      |          |

|                   |   |                  |
|-------------------|---|------------------|
| US 20040029129 A1 | Identification of essential genes in microorganisms   | 20040212 435/6   |
| US 20040015461 A1 | Risk-averting method of training neural networks and estimating regression models                     | 20040122 706/25  |
| US 20040010375 A1 | Methods and apparatus for processing spectral data for use in tissue characterization                 | 20040115 702/19  |
| US 20040009536 A1 | System and method for predicting admet/tox characteristics of a compound                              | 20040115 435/7.2 |
| US 20040002930 A1 | Maximizing mutual information between observations and hidden states to minimize classification       | 20040101 706/46  |
| US 20030215786 A1 | Methods and systems for the identification of components of mammalian biochemical networks            | 20031120 435/4   |
| US 20030211486 A1 | Compositions and methods for detecting polymorphisms associated with pigmentation                     | 20031113 435/6   |
| US 20030208289 A1 | Method of recognition of human motion, vector sequences and speech                                    | 20031106 700/61  |
| US 20030200189 A1 | Automatic neural-net model generation and maintenance   | 20031023 706/26  |
| US 20030187585 A1 | Method and system to build optimal models of 3-dimensional molecular structures                       | 20031002 702/19  |
| US 20030167454 A1 | Method of and system for providing metacognitive processing for simulating cognitive tasks            | 20030904 717/104 |
| US 20030162301 A1 | Method and system for classifying a biological sample   | 20030828 436/172 |
| US 20030143520 A1 | Gene discovery for the system assignment of gene function   | 20030731 435/4   |
| US 20030139957 A1 | Method of rule constrained statistical pattern recognition  | 20030724 705/7   |
| US 20030138077 A1 | Systems and methods for global optimization of treatment planning for external beam radiation         | 20030724 378/65  |
| US 20030102628 A1 | Impact energy absorbing structure   | 20030605 273/348 |
| US 20030100974 A1 | Optimal operation of a power plant  | 20030529 700/286 |
| US 20030095692 A1 | Method and system for lung disease detection  | 20030522 382/128 |
| US 20030088320 A1 | Unsupervised machine learning-based mathematical model selection                                      | 20030508 700/30  |
| US 20030084157 A1 | Tailorable optimization using model descriptions of services and servers in a computing environment   | 20030501 709/226 |
| US 20030083947 A1 | System, method and computer program product for governing a supply chain consortium in a supply chain | 20030501 705/22  |
| US 20030074250 A1 | System, method and computer program product for collaborative forecasting in a supply chain           | 20030417 705/10  |
| US 20030069774 A1 | System, method and computer program product for distributor/supplier selection in a supply chain      | 20030410 705/8   |
| US 20030046401 A1 | Dynamically determining appropriate computer user interfaces  | 20030306 709/228 |
| US 20030018513 A1 | System, method and computer program product for benchmarking in a supply chain management             | 20030123 705/10  |
| US 20020196975 A1 | Population mixture modeling with an indeterminate number of sub-populations                           | 20021226 382/171 |
| US 20020186874 A1 | METHOD AND MEANS FOR IMAGE SEGMENTATION IN FLUORESCENCE SCANNING CY                                   | 20021212 382/133 |
| US 20020156663 A1 | Shipping and transportation optimization system and method  | 20021024 705/7   |
| US 20020107858 A1 | Method and system for the dynamic analysis of data  | 20020808 707/100 |
| US 20020107599 A1 | Method and system for dispatching semiconductor lots to manufacturing equipment for fabrication       | 20020808 700/99  |
| US 20020091664 A1 | Methods for measuring therapy resistance  | 20020711 707/1   |
| US 20020061569 A1 | Identification of essential genes in prokaryotes  | 20020523 435/183 |
| US 20020054293 A1 | Method of and device for inspecting images to detect defects  | 20020509 356/430 |
| US 20010028731 A1 | Canonical correlation analysis of image/control-point location coupling for the automatic location    | 20011011 382/118 |
| US 20010010090 A1 | Method for design optimization using logical and physical information                                 | 20010726 716/2   |
| US 6879973 B2     | Automated diagnosis of printer systems using Bayesian networks  | 20050412 706/52  |
| US 6865567 B1     | Method of generating attribute cardinality maps   | 20050308 707/2   |
| US 6839581 B1     | Method for detecting Cheyne-Stokes respiration in patients with congestive heart failure              | 20050104 600/324 |
| US 6834237 B2     | Method and system for classifying a biological sample   | 20041221 702/19  |
| US 6813532 B2     | Creation and display of indices within a process plant  | 20041102 700/108 |
| US 6804381 B2     | Method of and device for inspecting images to detect defects  | 20041012 382/111 |
| US 6795798 B2     | Remote analysis of process control plant data   | 20040921 702/188 |
| US 6795567 B1     | Method for efficiently tracking object models in video sequences via dynamic ordering of features     | 20040921 382/103 |

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| US 6792399 B1 | Combination forecasting using clusterization   | 20040914 703/2      |
| US 6757579 B1 | Kalman filter state estimation for a manufacturing system  | 20040629 700/108    |
| US 6751536 B1 | Diagnostic system and method for enabling multistage decision optimization for aircraft preflight  | 20040615 701/29     |
| US 6750866 B1 | Method and system for dynamically filtering the motion of articulated bodies                       | 20040615 345/474    |
| US 6743576 B1 | Database system for predictive cellular bioinformatics   | 20040601 435/4      |
| US 6738716 B1 | Database system for predictive cellular bioinformatics   | 20040518 702/19     |
| US 6735566 B1 | Generating realistic facial animation from speech  | 20040511 704/256    |
| US 6725208 B1 | Bayesian neural networks for optimization and control  | 20040420 706/23     |
| US 6697657 B1 | Method and devices for laser induced fluorescence attenuation spectroscopy (LIFAS)                 | 20040224 600/323    |
| US 6671661 B1 | Bayesian principal component analysis  | 20031230 703/2      |
| US 6658467 B1 | Provision of informational resources over an electronic network                                    | 20031202 709/224    |
| US 6658396 B1 | Neural network drug dosage estimation  | 20031202 706/17     |
| US 6636862 B2 | Method and system for the dynamic analysis of data   | 20031021 707/101    |
| US 6631331 B1 | Database system for predictive cellular bioinformatics   | 20031007 702/19     |
| US 6628821 B1 | Canonical correlation analysis of image/control-point location coupling for the automatic location | 20030930 382/155    |
| US 6618490 B1 | Method for efficiently registering object models in images via dynamic ordering of features        | 20030909 382/103    |
| US 6615141 B1 | Database system for predictive cellular bioinformatics   | 20030902 702/19     |
| US 6606615 B1 | Forecasting contest  | 20030812 706/45     |
| US 6601051 B1 | Neural systems with range reducers and/or extenders  | 20030729 706/23     |
| US 6597801 B1 | Method for object registration via selection of models with dynamically ordered features           | 20030722 382/103    |
| US 6584456 B1 | Model selection in machine learning with applications to document clustering                       | 20030624 706/45     |
| US 6584369 B2 | Method and system for dispatching semiconductor lots to manufacturing equipment for fabrical       | 20030624 700/100    |
| US 6581048 B1 | 3-brain architecture for an intelligent decision and control system                                | 20030617 706/23     |
| US 6574279 B1 | Video transcoding using syntactic and semantic clues   | 20030603            |
| US 6567775 B1 | Fusion of audio and video based speaker identification for multimedia information access           | 20030520 704/231    |
| US 6557145 B2 | Method for design optimization using logical and physical information                              | 20030429 716/2      |
| US 6549879 B1 | Determining optimal well locations from a 3D reservoir model                                       | 20030415 703/10     |
| US 6546073 B1 | Systems and methods for global optimization of treatment planning for external beam radiation      | 20030408 378/65     |
| US 6542546 B1 | Adaptable compressed bitstream transcoder  | 20030401 375/240.12 |
| US 6535865 B1 | Automated diagnosis of printer systems using Bayesian networks                                     | 20030318 706/52     |
| US 6530873 B1 | Brachytherapy treatment planning method and apparatus  | 20030311 600/1      |
| US 6505475 B1 | Method and apparatus for measuring and improving efficiency in refrigeration systems               | 20030114 62/192     |
| US 6493386 B1 | Object based bitstream transcoder  | 20021210 375/240.1  |
| US 6490320 B1 | Adaptable bitstream video delivery system  | 20021203 375/240.08 |
| US 6473084 B1 | Prediction input   | 20021029 345/440    |
| US 6400828 B2 | Canonical correlation analysis of image/control-point location coupling for the automatic location | 20020604 382/100    |
| US 6371916 B1 | Acoustic analysis of bone using point-source-like transducers                                      | 20020416 600/449    |
| US 6263334 B1 | Density-based indexing method for efficient execution of high dimensional nearest-neighbor qui     | 20010717 707/5      |
| US 6240399 B1 | System and method for optimizing investment location   | 20010529 705/36     |
| US 6188776 B1 | Principle component analysis of images for the automatic location of control points                | 20010213 382/100    |
| US 6182014 B1 | Method and system for optimizing logistical operations in land seismic surveys                     | 20010130 702/14     |
| US 6169981 B1 | 3-brain architecture for an intelligent decision and control system                                | 20010102 706/23     |
| US 6151566 A  | Piecewise continuous control of groundwater remediation  | 20001121 703/10     |

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| US 6148274 A     | Optimization adjusting method and optimization adjusting apparatus                                   | 20001114 703/6     |
| US 6128607 A     | Computer implemented machine learning method and system  | 20001003 706/13    |
| US 6124597 A     | Method and devices for laser induced fluorescence attenuation spectroscopy                           | 20000926 250/461.2 |
| US 6081766 A     | Machine-learning approach to modeling biological activity for molecular design and to modeling       | 20000627 702/27    |
| US 6049774 A     | Machine, method and medium for dynamic optimization for resource allocation                          | 20000411 705/8     |
| US 6031984 A     | Method and apparatus for optimizing constraint models  | 20000229 703/2     |
| US 6015383 A     | Apparatus and method for acoustic analysis of bone   | 20000118 600/437   |
| US 6004015 A     | Optimization adjusting method and optimization adjusting apparatus                                   | 19991221 700/28    |
| US 5987444 A     | Robust neural systems  | 19991116 706/25    |
| US 5949989 A     | Method of designing and developing engine induction systems which minimize engine source n           | 19990907 703/8     |
| US 5930780 A     | Distributed genetic programming  | 19990727 706/13    |
| US 5930762 A     | Computer aided risk management in multiple-parameter physical systems                                | 19990727 705/7     |
| US 5930749 A     | Monitoring, identification, and selection of audio signal poles with characteristic behaviors, for s | 19990727 704/228   |
| US 5924066 A     | System and method for classifying a speech signal  | 19990713 704/232   |
| US 5918200 A     | State estimating apparatus   | 19990629 702/180   |
| US 5862513 A     | Systems and methods for forward modeling of well logging tool responses                              | 19990119 702/9     |
| US 5857462 A     | Systematic wavelength selection for improved multivariate spectral analysis                          | 19990112 600/310   |
| US 5825978 A     | Method and apparatus for speech recognition using optimized partial mixture tying of HMM stat        | 19981020 704/256   |
| US 5815394 A     | Method and apparatus for efficient design automation and optimization, and structure product         | 19980929 700/97    |
| US 5813798 A     | Piecewise continuous control of groundwater remediation  | 19980929 405/52    |
| US 5809490 A     | Apparatus and method for selecting a working data set for model development                          | 19980915 706/16    |
| US 5796920 A     | Multiprocessor system and method for identification and adaptive control of dynamic systems          | 19980818 706/20    |
| US 5790692 A     | Method and means of least squares designed filters for image segmentation in scanning cytor          | 19980804 382/133   |
| US 5720290 A     | Apparatus and method for acoustic analysis of bone using optimized functions of spectral and 1       | 19980224 600/449   |
| US 5680513 A     | Series parallel approach to identification of dynamic systems  | 19971021 706/23    |
| US 5668717 A     | Method and apparatus for model-free optimal signal timing for system-wide traffic control            | 19970916 700/51    |
| US 5600753 A     | Speech recognition by neural network adapted to reference pattern learning                           | 19970204 704/200   |
| US 5592943 A     | Apparatus and method for acoustic analysis of bone using optimized functions of spectral and 1       | 19970114 600/449   |
| US 5587897 A     | Optimization device  | 19961224 700/28    |
| US 5579436 A     | Recognition unit model training based on competing word and word string models                       | 19961126 704/244   |
| US 5566092 A     | Machine fault diagnostics system and method  | 19961015 702/185   |
| US 5526281 A     | Machine-learning approach to modeling biological activity for molecular design and to modeling       | 19960611 702/22    |
| US 5435309 A     | Systematic wavelength selection for improved multivariate spectral analysis                          | 19950725 600/310   |
| US 5377307 A     | System and method of global optimization using artificial neural networks                            | 19941227 706/19    |
| US 20030088320 A | Selecting near optimal or optimal mathematical model from set of candidate models, such as           | 20030508           |